True Elements.	Apparent Orbit.
$P = 115$ years	Length of major axis $= 0''.82$
$T = 1902.7$	Length of minor axis $= 0''.24$
$e = 0.80$	Distance of star from center $= 0''.33$
$a = 0''.42$	Position-angle of major axis $= 11°.45$
$\Omega = 16°.3$	Position-angle of periastron $= 189°.2$
$i = \pm 62.25$	
$\omega = 165.0$	
Angles decreasing.	

The following orbit of 4 *Aquarii* ($= \Sigma 2729$) was computed in 1905, because of the very large residuals resulting from the comparison of my measures with SEE's elements. They were not published at that time, however, because of the uncertainty introduced by the discordance of the early measures. Since then LEWIS has published an orbit with nearly the same period as that here given, but with different geometric elements. For this reason it seems desirable to place my results on record, especially as they represent the measures of the past four years within the limit of error of measurement. They are:—

True Elements.	Apparent Orbit.
$P = 135.6$ years	Length of major axis $= 1''.21$
$T = 1899.8$	Length of minor axis $= 0''.57$
$e = 0.35$	Distance of star from center $= 0''.12$
$a = 0''.64$	Position-angle of major axis $= 165°.4$
$\Omega = 164°.8$	Position-angle of periastron $= 221°.2$
$i = \pm 62.3$	
$\omega = 73.3$	
Angles increasing.	

More detailed accounts of these investigations will be published later.

R. G. AITKEN.

March, 1909.

THE PERIOD OF β *CANIS MAJORIS*.

An extensive series of spectrograms of β *Canis Majoris* has been obtained. This star was announced as a spectroscopic binary a few months ago. The period of velocity variation is very close to six hours. This star, therefore, has a shorter

period than any other known spectroscopic binary except *β Cephei.* The period of *β Cephei* was found by FROST to be $4^h\ 34^m.2$.

The velocity of *β Canis Majoris,* reduced to the Sun, varies between $+\ 23^{km}$ and $+\ 42^{km}$ per second. The interval between greatest positive and greatest negative velocity is two and a half hours. It is fortunate that the star is bright (2.6 phot. mag.). In fair seeing, and with a slit-width of 0.0013 inch, an exposure of eighteen minutes produces a well-exposed spectrogram. If an exposure of two hours had been required, the binary character of this star might easily have escaped detection.

It is not impossible that some of the fainter stars having broad and fuzzy lines are spectroscopic binaries of short period. On such stars it will be necessary to reduce the exposure time as much as possible, by using a wide slit and probably also a low dispersion.

SEBASTIAN ALBRECHT.

February, 1909.

THE VISIBILITY OF MT. WHITNEY FROM MT. HAMILTON.

In a note in No. 124 of these *Publications,* I stated my reasons for thinking that Mt. Whitney was visible from Mt. Hamilton. Professor WRIGHT has made some further investigations and computations on this matter and concludes that it is not Mt. Whitney but the Kaweah Peaks which I have observed.

The identification of Mt. Whitney in my note depends to a great extent on the computed bearing, which appears to be in error by a sufficient amount to make it coincide with the observed bearing of the Kaweah Peaks, and that Mt. Whitney is in reality just obscured by Milestone Peaks and the ridge which extends from them to the southwest.

April 2, 1909. C. D. PERRINE.

LECTURES AT BERKELEY.

The following course of lectures was given during the present semester before the class in Modern Astronomy at the University of California:—